



STIC Search Report

Biotech-Chem Library

STIC Database Tracking Number: 142006

TO: Terra Gibbs
Location: 2d10 / 2c18
Tuesday, January 25, 2005
Art Unit: 1635
Phone: 272-0758
Serial Number: 10 / 005337

From: Jan Delaval
Location: Biotech-Chem Library
Rem 1a51
Phone: 272-2504

jan.delaval@uspto.gov

Search Notes

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SEARCH REQUEST FORM

Scientific and Technical Information Center

Requester's Full Name: _____ Examiner #: _____ Date: _____
Art Unit: _____ Phone Number 30 _____ Serial Number: _____
Mail Box and Bldg/Room Location: _____ Results Format Preferred (circle): PAPER DISK E-MAIL

If more than one search is submitted, please prioritize searches in order of need.

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of invention: _____

Inventors (please provide full names): _____

Earliest Priority Filing Date: _____

**For Sequence Searches Only* Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.*

STAFF USE ONLY

Searcher: Jan
Searcher Phone #: 22504
Searcher Location: _____
Date Searcher Picked Up: 1/25/05
Date Completed: 1/25/05
Searcher Prep & Review Time: _____
Clerical Prep Time: 10
Online Time: + 45

Type of Search

NA Sequence (#) ☒
AA Sequence (#) _____
Structure (#) _____
Bibliographic _____
Litigation _____
Fulltext _____
Patent Family _____
Other _____

Vendors and cost where applicable

STN _____
Dialog _____
Questel/Orbit _____
Dr.Link _____
Lexis/Nexis _____
Sequence Systems ☒
WWW/Internet _____
Other (specify) _____

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142006

Delaval, Jan

From: Gibbs, Terra
Sent: Tuesday, January 25, 2005 2:16 PM
To: Delaval, Jan
Subject: RE: 10/005337

The Accession number is AF041847.

-----Original Message-----

From: Delaval, Jan
Sent: Tuesday, January 25, 2005 8:08 AM
To: Gibbs, Terra
Subject: 10/005337

Terra -

I am processing your search request for 10 / 005337.

You have requested a comparison between seq id no 2 and af04184.

I have not been able to locate this accession number in any of our in-house databases; I could not locate this number at NCBI.

Please verify the accession number.

Thanks.

Jan Delaval, 22504

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STIC-Biotech/ChemLib

142006

From: Gibbs, Terra
Sent: Tuesday, January 18, 2005 4:42 PM
To: STIC-Biotech/ChemLib
Subject: RE: Sequence comparison

I submitted this request, but put the wrong Accession Number,

I requested a search for SEQ ID NO: 2 of USSN 10/005,337. Accession number **AF04184** came up as a good piece of art.

However, I need Accession Number **AF04184** to be at least 80% identical to SEQ ID NO:2 of USSN 10/005,337 or as close as possible.

Can I please have a comparison between these two sequences, with the similarity being at least 80%?

Thank You.

-----Original Message-----

From: Gibbs, Terra
Sent: Friday, January 07, 2005 4:24 PM
To: STIC-Biotech/ChemLib
Subject: Sequence comparison

I requested a search for SEQ ID NO: 2 of USSN 10/005,337. Accession number AF131884 came up as a good piece of art.

However, I need Accession Number AF131884 to be at least 80% identical to SEQ ID NO:2 of USSN 10/005,337.

Can I please have a comparison between these two sequences, with the similarity being at least 80%?

Thank You.

*Terra Cotta Gibbs, Ph.D.
Art Unit 1635
Remsen Building 2D10
Mailbox 2C18
571-272-0758*

STAFF USE ONLY

Searcher: _____
Searcher Phone: 2- _____
Date Searcher Picked up: _____
Date Completed: _____
Searcher Prep/Rev. Time: _____
Online Time: _____

Type of Search

NA Sequence: # _____
AA Sequence: # _____
Structure: # _____
Bibliographic: _____
Litigation: _____
Patent Family: _____
Other: _____

Vendors and cost where applicable

STN: _____
DIALOG: _____
QUESTEL/ORBIT: _____
LEXIS/NEXIS: _____
SEQUENCE SYSTEM: _____
WWW/Internet: _____
Other(Specify): _____

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STIC-Biotech/ChemLib

1412004

From: Gibbs, Terra
Sent: Friday, January 07, 2005 4:24 PM
To: STIC-Biotech/ChemLib
Subject: Sequence comparison

I requested a search for SEQ ID NO: 2 of USSN 10/005,337. Accession number AF131884 came up as a good piece of art.
However, I need Accession Number AF131884 to be at least 80% identical to SEQ ID NO:2 of USSN 10/005,337.
Can I please have a comparison between these two sequences, with the similarity being at least 80%?
Thank You.

Terra Cotta Gibbs, Ph.D.
Art Unit 1635
Remsen Building 2D10
Mailbox 2C18
571-272-0758

RECEIVED
JAN - 7 2005
TECH/CHMEL E...
(STIC)

STAFF USE ONLY

Searcher: _____
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Structure: # _____
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Litigation: _____
Patent Family: _____
Other: _____

Vendors and cost where applicable

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SEQUENCE SYSTEM: _____
WWW/Internet: _____
Other(Specify): _____

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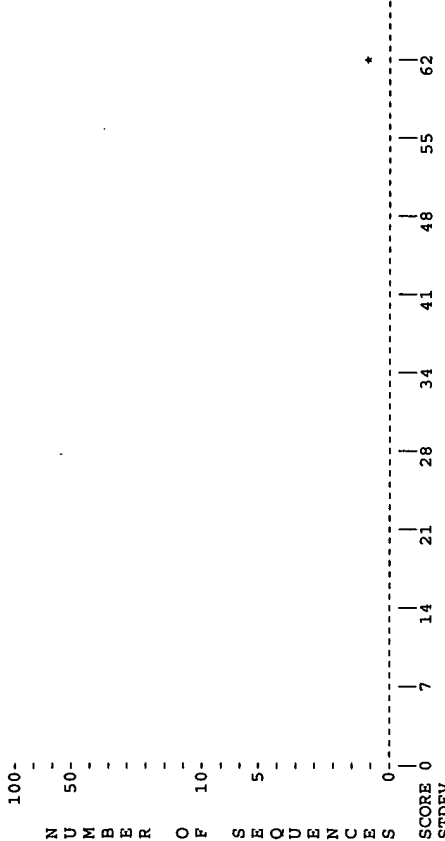
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FastDB - Fast Pairwise Comparison of Sequences
Release 5.4

Results file seq2-af041847.res made by jdelaval on Tue 25 Jan 105 14:35:43-PST.

Query sequence being compared:US-10-005-337A-2 (1-2074)
Number of sequences searched: 1
Number of scores above cutoff: 1

Results of the initial comparison of US-10-005-337A-2 (1-2074) with:
File : af041847.seq



PARAMETERS

Similarity matrix Unitary K-tuple 4
Mismatch penalty 1 Joining penalty 30
Gap penalty 1.00 Window size 32
Gap size penalty 0.33
Cutoff score 0
Randomization group 0

SEARCH STATISTICS

Scores: Mean 62 Median 0 Standard Deviation 0.00
Times: CPU 00:00:00.00 Total Elapsed 00:00:00.00
Number of residues: 1026
Number of sequences searched: 1
Number of scores above cutoff: 1

The scores below are sorted by initial score.
Significance is calculated based on initial score.

A 100% identical sequence to the query sequence was not found.

The list of best scores is:

Sequence Name Description Length Score Score Init. Opt.

1. af041847 TOIG of: af041847 check: 453 1026 62 434 0.00 0

1. US-10-005-337A-2 (1-2074)
af041847 TOIG of: af041847 check: 4536 from: 1 to: 1026

TOIG of: af041847 check: 4536 from: 1 to: 1026

LOCUS AF041847 1026 bp mRNA linear ROD 21-FEB-1998
DEFINITION Mus musculus cardiac ankyrin repeat protein MCRP mRNA, complete cds.

ACCESSION AF041847
VERSION AF041847.1 GI:2905615

KEYWORDS
SOURCE Mus musculus (house mouse)

ORGANISM
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Mus.
1 (bases 1 to 1026)

REFERENCE
AUTHORS Zou,Y., Evans,S., Chen,J., Kuo,H.C., Harvey,R.P. and Chien,K.R.
TITLE CARP, a cardiac ankyrin repeat protein, is downstream in the Nkx2-5 homeobox gene pathway

JOURNAL Development 124 (4), 793-804 (1997)

MEDLINE 97195688
PUBMED 9043061

REFERENCE
AUTHORS Chen,J. and Chien,K.R.
TITLE Direct Submission

JOURNAL Submitted (07-JAN-1998) Medicine, UCSD, 9500 Gilman Dr, La Jolla, CA 92093, USA

FEATURES

Location/Qualifiers
1..1026
/organism="Mus musculus"
/mol_type="mRNA"
/db_xref="taxon:10090"
/tissue_type="heart"
15..974
/codon_start=1
/product="cardiac ankyrin repeat protein MCRP"
/protein_id="AAC03533.1"
/db_xref="GI:2905616"

CDS

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ORIGIN

AF041847 Length: 1026 January 25, 2005 14:32 Type: N Check: 4536 ..

Initial Score = 62 Optimized Score = 434 Significance = 0.00
Residue Identity = 48% Matches = 549 Mismatches = 407
Gaps = 168 Conservative Substitutions = 0

10 20 30 40 50 60 70
CTGCAGCAAGTTACTTAATGTTTTTGGCTCAGCATCTCTCTGTAAATAGAGAGCATTAGTCTTGTCTCCAA

80 90 100 110 120 130 140
CTTCGAGGCGATGGACAGCTCTGGGATTTTCATATCCAGACCCCTTAAACATCCACAGTCTTCCCCCAAC

150 160 170 180 190 200 210
ACTTCTCTCTTAATACCTCCCTCAGTTGGGTGAGCCCTGGAACAAAAGGCATACGAAATGGTAGAAAA

220 230 240 250 260 270 280
GTGTCCATGACTACTTCTGACTTAGATGAAGAGACCAATGAAAAATAGTAATGACTCTGTTTGTCTCAGCAGG

290 300 310 320 330 340 350 360
ACATATCTAAATAGGAGCTATACAAAGAGATTAGCATGGACTCTGTGCAAGATGACACACAATTTGT

IntelliGenetics

FastDB - Fast Pairwise Comparison of Sequences
Release 5.4

Results file us-10-005-337a-2-inv.res made by jdelaval on Tue 25 Jan 105 14:36:34-PST.

Query sequence being compared:	US-10-005-337A-2'	(1-2074)
Number of sequences searched:	1	
Number of scores above cutoff:	1	

Results of the initial comparison of US-10-005-337A-2' (1-2074) with:
File : af041847.seq

A bar chart titled 'STDEV' showing the frequency of each letter. The vertical axis is labeled 'SCORE' and ranges from 0 to 100 in increments of 5. The horizontal axis lists the letters: S, T, D, E, V, N, C, C, E, S. The bars represent the following counts: S=3, T=9, D=12, E=16, V=19, N=22, C=25, C=28, E=25, S=19.

Letter	Score
S	3
T	9
D	12
E	16
V	19
N	22
C	25
C	28
E	25
S	19

Sequence Name	Description	Length	Score	Init. Opt.
1. af041847	TOIG of: af041847	453	1026	28 423 0.00 0

1. US-10-005-337A-2' (1-2074)
af041847 TOIG of: af041847 check: 4536 from: 1 to: 1026

TOIG of: af041847 check: 4536 from: 1 to: 1026

LOCUS	AF041847	1026 bp	linear	ROD 21-FEB-1998
DEFINITION	Mus musculus cardiac ankyrin repeat protein MCARP mRNA, complete cds.			

AF041847
AF041847.1

KEYWORDS
SOURCE
Mus musculus (house mouse)

Mus musculus
ORGANISM
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sclurognathi; Muridae; Murinae; Mus.

REFERENCE	1 (bases 1 to 1026)
AUTHORS	Zou, Y., Evans, S., Chen, J., Kuo, H. C.
TITLE	CARP, a cardiac ankyrin repeat protein, is a homeobox gene pathway
JOURNAL	Development 124 (4), 793-804 (1997)
MEDLINE	97195688
PUBMED	9043061

REFERENCE
AUTHORS
TITLE
JOURNAL
2 (bases 1 to 1026)
Chen, J. and Chien, K.R.
Direct Submission
Submitted (07-JAN-1998) Medicine,
CA92093 USA

CDs

ORIGIN

AF041847 Length: 1026 January 25, 2005 14:32 Type: N Check: 4536 ..

```

Initial Score      = 28      Optimized Score = 423      Significance = 0.00
Residue Identity  = 46%     Matches       = 513     Mismatches  = 453
Gaps              = 135     Conservative Substitutions = 0

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GTTCGCTGAAGGAGTCTTGATGATGTTTTCTGTGTCGTGGAAGGAATCCCTGGAGTTGGCCCTGCTGGGCCCCCTC

80	90	100	110	120	130	140
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CACACCGGTGAGCTTATATAGCTGGGGCCGGGTGAGATAATCTTCCAACTGGGAACCGAAGTAACTCC

GGCCCCCATTAGGAGCCAACTCAGAGGCAGGTGAATTTTCATTCCAGACTCAGTGTCTGGGAAGCTGAAGAGG

220	230	240	250	260	270	280
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The list of best scores is:

370 380 390 400 410 420 430
ACCACATCACTGCGCCCTTTTCTTTCTTTGTCAGCTTTTCATATGACTACTCTATCAAGAAATGTAGATGCCCTAC
440 450 460 470 480 490 500
ATATACACCCCGAGTAATATCTTTCTGTATAGCAGACTTATCAACACTTCACTTTAGGGGAAACTTGTCCCA
510 520 530 540 550 560 570
GGACATCTATTCCCTGGGTAAACAGCCTGAGGGGAAGGATCTGGGCCCTAAAGSCACTTGTCTATATCTG
580 590 600 610 620 630 640
TTTGGAAATCTTTGGAGTGATGTCTGGGCTAAATAGGCCCATGACATGCCACTTACCATCATTTATAAGAC
650 660 670 680 690 700 710 720
AATTGAAGCAATTCAGTAATGCACTTTCTTTTATGATGTCACTGGCCATTAGCACATGACATGCTTTACCGTG
730 740 750 760 770 780 790
TTCTAAACAGCATATAATTTGGAGCAATTTTACTTCAAAATGGATCAGAGTGGTCAAGAAATAGAGTAAT
800 810 820 830 840 850 860
GAAACGAGCTATCAGCGCGGTGCGAGTGGCTTACACCTGTAATCCCAACATTTTGGGAGGCAGAGACAGGAAG
870 880 890 900 910 X 920 930
AATTGCTTAGCTAGGATTCATATACTAGCTGGGCAACATGGCAAAATCCCATCT-CTACCACAA--ATACT
TCACGGCTGCCAACATGATGTACT
X 10 20
940 950 960 970 980 990 1000
-ATA-TATA-TATATGAVAAATAGACACAGATATAGCAATGGCAGACTCTGTATAGGTCATTTGAGCTG
GAGATGAGGAGCTG-GTAACAGGCAA--AAAGACAGCAATGG--GGCCGAGGGGAATTCCTTCCCTGGG
30 40 50 60 70 80 90
1010 1020 1030 1040 1050 1060 1070
AAGTTCTCAAAATCTGTGGGAAAGAAATCACTGTGGAGCTTGTCAAGAAATACAGA-TCCCTGGCCCCAC
TTCCGGCCA-ACAGCC-TGAAGCAGCGGGGAGGAGCAACCGAA-AAAGCAGAACTCCGAG-AGGCAGAGCTC
160 170 180 190 200 210 220
AATCTGATCAATCAAGATTTGACACACGTGGTGGAGGATA-ATGCATTT---TGCTTCCGGGAAGGTTG
1150 1160 1170 1180 1190 1200
AAAAAGAAAAAATACAGAAATCAAGATCAAAAGCTTGAAGAACTTGAAGACCTTGAAATTAATTTTCACTGAAG
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AAAAGTCTCTATTTCTGTTTCTTAATCTTTAGGTGTAATTAATGTA-AACATACTGGGGGTATTTTATA
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GTTTCAGGAAAACTGGGTTTCTGATTAAGAAAGAGAGAGAGAAATGGGAGAGGAAATGTGAATGGA
ACCTGTGGATGTGCCGAG-GTTTCTGAAAGCTGCGCTGGAGAACAACTGCCAGTTG---TAGAGAA---A
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GGGAGTGTAAATAGGAAGTATGTTGACCTTTGTG-TGTCTATTTCTCCCAAACTCAC-CCATCAAC
TTG--GTGTACAGACAGAA--CAGCCCCGACGTCTCGATGAGTAT-----AAACGGAGCGCACTCCAC
430 440 450 460 470 480
1430 1440 1450 1460 1470 1480
AAATGGCTGCCATCTCTCTTTGCC---CCTTGAATGCTCAGTCAAGTGGATGTTTCTGAAA---AACTT
CGAGCATGCTTAGA-AGGACATTTGGCGATCGTGGAGAAATTAAT-GGAGGCTGGAG-CCGAGATTGAATTC

490 500 510 520 530 540 550
1490 1500 1510 1520 1530 1540 1550
TGAGA-AGAC-----ATCGACTCCCAAGCAAGAAATGATGCAAGAGGACCTTCCCAGTACTCTCT
CGAGATATGCTTTGAATCACACAGCCATCCACTGGGCATGTCGTGGAGGAA-ACGCAAGATGTCCTGAACTGTT
560 570 580 590 600 610 620
1560 1570 1580 1590 1600 1610
G--TATCATATGTTCC--GGTC--TCCTA---ATATTCTATCTTA--AAGGGGTAAATAAG-GAATCTC
GCTGAACAAAGAGGCAAAATCAGTCCGACAGACAAGCT-TCTCAGCAGCGCTGCATGTCGCGGTGAGGA
630 640 650 660 670 680 690
1620 1630 1640 1650 1660 1670 1680
CTGGGCTTTTC-TTTGAGATGACACAGCTATC-----ACTATTTCTTTTAAATTTTCCCTTTCTCTTA
CTGGTCAATTAACAGTGCCTGAGCACCTC-ATCGCTCGAGGCTGATCTCAA---TGCCAAAGGACAGAGAA
700 710 720 730 740 750 760
1690 1700 1710 1720 1730 1740 1750
TTATTATTTTATATAT-ATGGAATGTTTCAAAATTTGTGTGTCATCTTGCACAGAGTCAAGCTA
GGAGACACCCCACTGCATGATGCTGTGAGGCTGAACCGCTATAAG-ATGATTC-----GACT-CTTGATG
770 780 790 800 810 820 830
1760 1770 1780 1790 1800 1810 1820
ATCTTCTTTGTATAGCTCTATTTTAGTATATGCTCTGTAAGCAACAGAGTCAATTAATTTTTCATGG
ACCTTCGGTGGGACCT-CAAGGTCAAGAACTGTCTG-GGAAG-ACCCCACTGATCTGTGTGTCACCTGG
840 850 860 870 880 890
1830 1840 1850 1860 1870 1880
-TCTCTTCACTTAAGTCAAGTAG-----TCATGGACACT-TTTTCTACCATT-TGCTAT-GC--CTTTT
CAGAGTGGAAACCAAGCAATATTCGACAGCCCCCAAGAGAAATCCCTACAAGAACTCTCGCATAGCTACATTC
900 910 920 930 940 950 960 970
1890 1900 1910 1920 1930 1940 1950 X
TGTTCCAGGCTGACCCAACTGAGGGAGGTATAGGAGGAGAGTGTGGGGAAGAGTGTGGGATGTT
TGAGAAAAG--AGACTC-AACAG---GAGCTGTTCCGAG--GCATTTTTT-----AAAGCA-TTTCCTCA
980 990 1000 1010 1020 X
1960 1970 1980 1990 2000 2010 2020
TAAGGCTCTTGATATGAATCCCAAGCTGTCCATGCCCTGAAAGTTGGAGCAAGACTAATGCTCTCATTT
2030 2040 2050 2060 2070
TACAGAGAGGATGCTGAGGCAAAAAAACATTAAGTAATCTTGCTGCAG

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